UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,731	01/31/2001	Paul Steven Halverson	ROC9-2000-0232-US1	2668

7590 04/14/2005	**EXAMINER**
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IBM Corporation, Dept. 917	ART UNIT / PAPER NUMBER
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2615	

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DATE MAILED: 04/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

Office Action Summary	Application No.	Applicant(s)
	09/774,731	HALVERSON, PAUL STEVEN
	Examiner	Art Unit
	Lin Ye	2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-15 and 20-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15, 20, 22, 24 and 26* is/are rejected.

7)☒ Claim(s) *21, 23, 25 and 27* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-15 and 20-27 filed on 10/14/04 have been

considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

3. Claims 1-3, 5, 7-9, 11, 13, 20, 22, 24 and 26 rejected under 35 U.S.C. 103(a) as being

unpatentable over Brais et al. U.S. Patent 5,995,936 in view of Bregler U.S. Patent

5,880,788.

   Referring to claim 1, the Brais reference discloses in Figures 1 and 9, a digital camera

system (See Col. 5, lines 5-10), comprising: a housing (camera 104, see Col. 6, lines 16-18);

a digital optical sensing apparatus mounted within said housing, said digital optical sensing

apparatus sensing optical images; a storage medium (computer 102) for storing digital optical

images captured by said digital optical sensing apparatus (See Col. 6, lines 65-67); an

acoustic sensor (transducer 106, See Col. 10, lines 40-41) capable of sensing human speech;

a speech reduction apparatus (inside of computer 102) coupled to said acoustic sensor, said

speech reduction apparatus converting human speech sensed by said acoustic sensor to a

symbolic text form(See Col. 10, lines 40-46); and a controller which stores said symbolic text

form in said storage medium in a relationship associated with a captured digital image (image

identifier in the form of filename is added to the text file) as shown in Figure 9 (See Col. 11,

lines 39-55). However, the Brais reference does not explicitly show each of multiple images

is associated with a discrete segment of a plurality of discrete segments of text.

The Bregler reference teaches in Figures 3 and 8, an image system receives a user

indication of a plurality of discrete time intervals (e.g., audio track 14 is a time base signal

including a phonetic words as a plurality of discrete segments), records a plurality of discrete

human speech segments sensed by a acoustic sensor in respective said discrete time intervals

(e.g., time warping as shown in Figure 8, see Col. 10, lines 15-30); causes said speech

reduction apparatus to convert each said human speech segment to a corresponding symbolic

text segment (by speech recognizer 16, See Col. 5, lines 37-41, and Col. 6, lines 1-35); and

automatically associates a respective digital optical image with each said symbolic text

segment (phonetic string or full pronunciations of the phone) based on a temporal

relationship between the time interval in which the discrete human speech segment

corresponding to the symbolic text segment was recorded (e.g., aligning each of image

segments with a corresponding symbolic text segment must involve time controlling, and

time controlling involves with adjusting time interval in order to realize synchronization, See

Col. 5, lines 40-61). The Bregler reference is evidence that one of ordinary skill in the art at

the time to see more advantages the system can control each of multiple images associated

with a discrete segment of a plurality of discrete segments of text based on a temporal

relationship between the time interval in which the discrete human speech segment so that

providing a technique which permits any given sound utterance to be substituted for the

soundtrack of a previously recorded video sequence, without requiring a video recording of

the new sounds being uttered; and it is also further desirable to provide such a method which

readily lens itself to automation, to thereby minimize the amount of manual input that is

required. For that reason, it would have been obvious one of ordinary skill in the art at the

time to modify the digital camera system of Brais for providing a controller to control each

of multiple images associated with a discrete segment of a plurality of discrete segments of

text based on a temporal relationship between the time interval in which the discrete human

speech segment as taught by Bregler.

Referring to claim 2, the Brais and Bregler references disclose all subject matter as

discussed in respected to claim 1, and the Brais reference discloses wherein said controller

(inside of computer 102) comprises a programmable processor executing a control program

(acquire image mode program) for controlling the operation of said digital camera (a

command to acquire an image, See Col. 11, lines 51-54).

Referring to claim 3, the Brais and Bregler references disclose all subject matter as

discussed in respected to claim 1, and the Brais reference discloses wherein said speech

reduction apparatus comprises a speech reduction algorithm embodied as a plurality of

instructions executable on said programmable processor (See Col. 10, lines 41-46).

Referring to claim 5, the Brais and Bregler references disclose all subject matter as

discussed in respected to same comments with claim 1.

Referring to claim 7, the Brais and Bregler references disclose all subject matter as discussed in respected to claim 5, and the Brais reference discloses wherein said step of rendering said human speech in a symbolic text form is performed by a programmable processor executing a speech reduction program inside of computer 102 (See Col. 9, lines 31-35 and Col. 10, lines 21-28).

Referring to claim 8, the Brais and Bregler references disclose all subject matter as discussed in respected to claim 7, the Brais reference discloses wherein said programmable processor further executes a control program for controlling the operation of said digital camera, and said step of rendering said human speech in a symbolic text form is performed by said programmable processor in the background (While the text is an image identifier and inserted in image) when said control program is otherwise unoccupied (See Col. 13, lines 27-35) and the Bregler references discloses the segment of said plurality of discrete segments of human speech in respective corresponding segment of symbolic text as shown in Figure 3.

Referring to claim 9, the Brais and Bregler references disclose all subject matter as discussed in respected to same comments with claim 1.

Referring to claim 11, the Brais and Bregler references disclose all subject matter as discussed in respected to same comments with claim 1, and the Brais reference discloses uploading said at least one digital image and said at least one segment of symbolic text to a digital image formatting apparatus; and formatting said at least one digital image and said at least one segment of symbolic text for viewing by a user using said digital image formatting apparatus (any appropriate software application, i.e., Microsoft PowerPoint to format to world wide web pages or any multimedia files), wherein each said segment of symbolic text

is formatted for viewing in a human readable form (report) associated with its corresponding digital image (See Col. 12, lines 9-23).

Referring to claim 13, the Brais reference discloses wherein said digital image formatting apparatus is a general-purpose digital computer (102) executing a digital image-formatting program (i.e., Microsoft PowerPoint, See Col. 12, lines 12).

Referring to claim 20, the Brais and Bregler references disclose all subject matter as discussed in respected to same comments with claim 1, and the Bregler reference discloses wherein said controller associates a respective digital image with each symbolic text segment according to the following association: if a first digital image is captured during the recording of a human speech segment corresponding to the symbolic text segment, the symbolic text segment is associated with the first digital image as shown in Figures 3 and 8 (e.g., the Bregler reference teaches the system can automatically associates the symbolic text segment with the captured image responding to a human speech segment, such as speaker's lip position that corresponds to each spoken sound, see Col. 5, lines 55-61).

Referring to claim 22, the Brais and Bregler references disclose all subject matter as discussed in respected to same comments with claim 20.

Referring to claim 24, the Brais and Bregler references disclose all subject matter as discussed in respected to same comments with claim 20.

Referring to claim 26, the Brais and Bregler references disclose all subject matter as discussed in respected to same comments with claim 20.

4. Claims 4, 6, 10 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Brais et

al. U.S. Patent 5,995,936 in view of Bregler U.S. Patent 5,880,788 and Williams U.S. Patent

6,308,154.

Referring to claim 4, the Brais and Bregler references disclose all subject matter as

discussed in respected claim 1, except that the Brais reference does not explicitly provide any

detail of the speech to text conversion such as converts the human speech to an intermediate

symbolic form comprising a symbolic representation of phonemes, the intermediate symbolic

form being subsequently reduced to natural (spoken) language text by a separate apparatus.

The Williams reference discloses in Figures 1-3, a method for encoding a human speech

under a symbolic textual format (e.g., phonemes, morphemes, words, sentences etc., See Col.

2, lines 1-10), converting into a natural (spoken) language text by a separate apparatus (CPU

18 including speech recognition application 24 identify individual words and recognizing

phonetic elements. When words are recognized, the CPU 18 store the individual words as

textual information, and textual information subsequently reduced to natural language text

with speech attributes, See Col. 2, lines 1-16, lines 40-53 and Col. 3, lines 3-7). The

Williams reference is evidence that one of ordinary skill in the art at the time to see more

advantages for a speech recognition apparatus can be programmed to phonetically break

down the words so that a reader would have enough information to discern the meaning

conveyed and understanding which meaning was intended. For that reason, it would have

been obvious one of ordinary skill in the art to see the speech reduction apparatus (102)

converts said human speech sensed by said acoustic sensor to an intermediate symbolic form

comprising a symbolic representation of phonemes, said intermediate symbolic form being

subsequently reduced to natural language text by a separate apparatus disclosed by Brais.

Referring to claim 6, the Brais and Williams references disclose all subject matter as

discussed in respected claim 4.

Referring to claim 10, the Brais and Williams references disclose all subject matter as

discussed in respected claim 4.

Referring to claim 12, the Brais and Williams references disclose all subject matter as

discussed in respected claim 4.

5.   Claims 14-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Brais et al. U.S.

Patent 5,995,936 in view of Bregler U.S. Patent 5,880,788 and Englehardt U.S. Patent

5,477,511.

Referring to claims 14-15, the Brais and Bregler references disclose all subject matter as

discussed in respected claim 11, and the Brais reference shows the digital camera system can

format the digital image and the symbolic text (converted from human speech) to a

multimedia report or database file (See Col. 11, lines 45-48). However, the Brais reference

does not explicitly show a printer for printing out the report file on paper or a display screen

for viewing the report file.

The Englehardt reference discloses in Figures 1 and 4, a digital camera system

comprising: recording visual information (image) by CCD (16); receiving voice data and

transcribing the voice data by computer (5) voice recognition software; the both image data

and text data format in a documentation; a printer (52) coupled to the system for printing out

the documentation; and the computer display screen to viewing the documentation.(See Col.

5, lines 29-44). The Englehardt reference is evidence that one of ordinary skill in the art at

the time to see more advantages for digital camera system has a printer and display screen for

user to obtain a hard copy or quick preview immediately after the multimedia report is

completed. For that reason, it would have been obvious to see the digital camera has a printer

for printing out the report file on paper or a display screen for viewing the report file

disclosed by Brais.

Allowable Subject Matter

6. Claims 21, 23, 25 and 27 would be allowable if rewritten to overcome the rejection(s) under

35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the

limitations of the base claim and any intervening claims.

7. The following is an examiner's statement of reasons for allowance:

The prior art does not teach or fairly suggest the controller associates a respective digital

image with each symbolic text segment according to **all of the following association**

priorities: (1) if a first digital image is captured during the recording of a human speech

segment corresponding to the symbolic text segment, the symbolic text segment is associated

with the first digital image; (2) if no digital image is captured from a time the digital camera

is powered on until the end of the recoding of the human speech segment corresponding to

the symbolic text segment, and a second digital image is captured after recording the human

speech segment but before the digital camera is powered off, then the symbolic text segment

is associated with the second digital image; and (3) in all other cases, the symbolic text is

associated with the digital image most recently captured before the recording of the human

speech segment corresponding to the symbolic text segment.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office

action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until

after the end of the THREE-MONTH shortened statutory period, then the shortened statutory

period will expire on the date the advisory action is mailed, and any extension fee pursuant to

37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of

this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Lin Ye whose telephone number is (571) 272-7372. The examiner can

normally be reached on Mon-Fri 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, James J. Groody can be reached on (571) 272-7950. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status information

for unpublished applications is available through Private PAIR only. For more information

about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access

to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197

(toll-free).

TUAN HO
PRIMARY EXAMINER

Lin Ye
April 8, 2005